June 2002

Students load experiments for space station launch

by Susan Barone, ASC Public Affairs

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — Local and regional students worked with their base mentors in the Air Force Research Laboratory's Materials and Manufacturing Directorate clean room in early May to load their science experiments into containers that will take them to the International Space Station for the next phase of Project MISSE (Materials on the International Space Station Experiments).

The first, one-year materials experiments were lifted into orbit on STS 105, Discovery, Aug. 10, 2001, and are expected to return this year. Students have prepared three-year materials experiments for launch to the ISS, tentatively scheduled for January 2003. Project MISSE is an Air Force initiative designed for Air Force researchers to put passive materials into orbit for one to three years. Students were given the opportunity to conduct real research with scientists and engineers working in the field. Supported by contractors from Wright Technology Network, the Wright-Patterson Air Force Base Educational Outreach Office challenged students to identify a problem related to long duration space flight, propose a solution to the problem and design a passive test to solve the problem.

Student projects also were expected to apply to improving a condition of life on Earth. Experiment ideas were submitted, reviewed and developed with help from mentors from the base.

Partners in this project are AFRL, Boeing Phantom Works, NASA Langley and the Wright-Patterson Air Force Base. @